

Periodic Table of Elements - Practice Worksheet

Name: _____ Date: _____

Instructions: Use a periodic table to answer each question. Write your answer clearly. Questions progress from basic identification to periodic trends.

1. What is the chemical symbol for Gold?

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2. What is the atomic number of Carbon?

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3. Which element has the symbol 'Na' and what group does it belong to?

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4. How many protons does an atom of Oxygen have?

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5. Name the element in Period 3, Group 17.

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6. What is the atomic mass (rounded to the nearest whole number) of Iron (Fe)?

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7. Is Silicon (Si) a metal, nonmetal, or metalloid?

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8. Which element has atomic number 79, and what category does it belong to?

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9. As you move left to right across Period 2, does atomic radius increase or decrease?
Name one element from Period 2 to support your answer.

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10. Arrange the following elements in order of increasing electronegativity: Na, Cl, F, O.
Explain your reasoning using periodic trends.

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Answer Key

1. Au

2. 6

3. Sodium (Na); Group 1 (Alkali Metals)

4. 8

5. Chlorine (Cl)

6. 56

7. Metalloid

8. Gold (Au); Transition Metal

9. Decreases. Example: Lithium (Li, atomic number 3) has a larger atomic radius than Fluorine (F, atomic number 9) in the same period.

10. $\text{Na} < \text{Cl} < \text{O} < \text{F}$. Electronegativity increases across a period (left to right) and up a group (bottom to top). F is the most electronegative element on the table.

